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In the claims:

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1-52. (Cancelled)

53. (new) A method for aerosolizing a pharmaceutical formulation, the method comprising:

providing a valve within an airway leading to the lungs to prevent respiratory gases from flowing to the lungs when a user attempts to inhale, and then abruptly permitting respiratory gases to flow to the lungs by opening the valve when a threshold actuating vacuum caused by the attempted inhalation is exceeded,

providing a flow regulator within the airway, wherein the flow regulator varies the flow resistance through the airway to control the flow of respiratory gases; and

using the flow of respiratory gases to extract a pharmaceutical formulation from a receptacle and to place the pharmaceutical formulation within the flow of respiratory gases to form an aerosol.

54. (new) A method as in claim 53 wherein the threshold actuating vacuum is in a range from about 20 cm H₂O to about 60 cm H₂O.

55. (new) A method as in claim 53 wherein the flow regulator limits the flow of respiratory gases to the lungs is to a rate that is less than a certain rate.

56. (new) A method as in claim 55 wherein the certain rate is about 15 L/min.

57. (new) A method as in claim 53 wherein the flow regulator regulates the size of the airway leading to the lungs.

58. (new) A method as in claim 57 wherein the flow regulator comprises an elastomeric duckbill valve.

59. (new) A method as in claim 53 wherein the valve and the flow regulator are provided in series.

60. (new) A method as in claim 53 wherein the airway includes a parallel flow arrangement.

61. (new) An aerosolization device comprising:
a valve within an airway adapted to lead to the lungs of a user, wherein the valve prevents respiratory gases from flowing when a user attempts to inhale, and then abruptly permits respiratory gases to flow to the lungs by opening the valve when a threshold actuating vacuum caused by the attempted inhalation is exceeded,

a flow regulator within the airway, wherein the flow regulator is adapted to vary the flow resistance through the airway to control the flow of respiratory gases; and

an aerosolization mechanism adapted to extract a pharmaceutical formulation from a receptacle and to place the pharmaceutical formulation within the flow of respiratory gases to form an aerosol.

62. (new) A device as in claim 61 wherein the threshold actuating vacuum is in a range from about 20 cm H₂O to about 60 cm H₂O.

63. (new) A device as in claim 61 wherein the flow regulator limits the flow of respiratory gases to the lungs is to a rate that is less than a certain rate.

64. (new) A device as in claim 63 wherein the certain rate is about 15 L/min.

65. (new) A device as in claim 61 wherein the flow regulator varies the flow resistance by regulating the size of the airway leading to the lungs.

66. (new) A device as in claim 65 wherein the flow regulator comprises an elastomeric duckbill valve.

67. (new) A device as in claim 61 wherein the valve and the flow regulator are provided in series.

68. (new) A device as in claim 61 wherein the airway includes a parallel flow arrangement.